

# **Department of Defense Partners in Flight**

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**Conserving birds and their habitats  
on Department of Defense lands**

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# DoD and Migratory Birds

**Why is DoD  
Important to  
Migratory Birds?**



DEPARTMENT OF DEFENSE

# PARTNERS IN *Flight*

STRATEGIC  
PLAN

THE CONSERVATION AND MANAGEMENT  
OF MIGRATORY AND RESIDENT LANDBIRDS  
AND THEIR HABITATS ON  
DEPARTMENT OF DEFENSE LANDS



# Conservation Priorities

## DoD Partners in Flight

- **Monitoring**
  - Radar ornithology
  - MAPS
  - Satellite and remote tracking
  - Remote acoustic monitoring
- **BASH**
- **Grasslands**
- **Invasive & nuisance species**
- **International conservation**







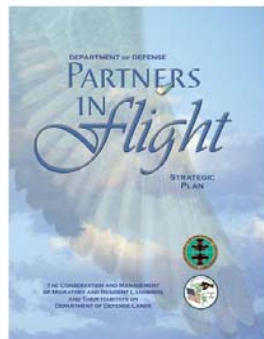
Department of Defense  
Partners in Flight

Fact Sheet #1  
November 2003

## Department of Defense Partners in Flight Program

### Mission

*To conserve migratory and  
resident birds and their  
habitats on Department of  
Defense lands.*



The Strategic Plan can be found at  
[www.dodpif.org](http://www.dodpif.org), or through the  
contact information on next page.

# Important Bird Areas

## DoD lands benefit priority bird species

### What is an Important Bird Area?

Some places are exceptionally important - even essential - for bird conservation. Directing protection and management efforts towards these sites is crucial if viable populations of many species are to persist in the long-term. Conservationists have long understood this fact, but only in recent years has a program emerged to identify and formally recognize these sites.

Important Bird Areas (IBA) are sites that are significant because they hold large concentrations or an exceptional diversity of birds, harbor rare or endangered species, or contain unique or threatened habitat. The IBA program is founded on the premise that identifying and conserving key habitat areas for bird populations is essential to bird conservation efforts. The program's goal is to identify and protect a network of sites around the world to help maintain naturally occurring bird populations. Specifically, IBA recognition means that a site provides essential habitat to breeding or non-breeding birds. While IBA sites vary in size, most are discrete and distinguishable from surrounding areas in character, habitat, or ornithological importance. It is important to note that there are *no* legal or management requirements imposed on sites identified as Important Bird Areas.

**History of the IBA Program in the US**  
From its start in Europe in the 1980s by BirdLife International, the IBA concept has led to the recognition of more than 7,000 sites worldwide. The IBA Program was launched in the U.S. in 1995 by BirdLife partner designate American Bird Conservancy (ABC), which has identified and documented those sites of significance on a global level throughout all 50 states. The National Audubon Society (Audubon) initiated a state-based IBA program that

same year in partnership with ABC, and has been building programs state by state. As of 2004, Audubon was operating IBA programs in 46 states. Today, ABC continues its IBA program for sites of global significance, but Audubon is now the BirdLife partner designate in the U.S., and is expanding its IBA program to include sites of global and continental significance.



Fort Riley's (KS) 50,000 acres of native tallgrass prairie is the largest remaining contiguous habitat of this type in North America. Photo: Chris Eberly

### Criteria

Generally, for a site to qualify as a global or continental IBA, it must, during at least some part of the year, contain habitat that supports: (1) significant numbers of a species of global conservation concern, such as Piping Plover, Kirtland's Warbler or Red-cockaded Woodpecker; (2) a species with a restricted range, such as Yellow-billed Magpie, Tricolored Blackbird or Brown-capped Rosy-Finch; (3) a species that is vulnerable because its populations are concentrated in one general habitat type or biome, such as Pinyon Jay, Brewer's Sparrow, or Oak Titmouse; or (4) a significantly large concentration of breeding, migrating or wintering birds, including waterfowl, seabirds, wading birds, raptors or landbirds. Continental and state level criteria scale down from the global criteria.

### Military Lands as IBAs

Some Department of Defense (DoD) lands, including military installations and Army Corps of Engineers projects, have been identified as IBAs. In general, an IBA should exist as an actual or potential protected area, or should have the potential to be managed in some way for birds and general nature conservation. Military installations, through their Integrated Natural Resources Management Plans (INRMP) and Sikes Act compliance, manage their lands in ways that benefit native bird populations. Many Corps project sites also implement comprehensive management plans that enhance bird habitat. While IBAs have no minimum or maximum size, they should be large enough to supply all or most of the requirements of the bird(s) during the season for which they are important. DoD lands identified as IBAs also satisfy this need. To that end, the DoD PIF program endorses IBAs on military and Corps of Engineers lands, where appropriate.

### Why are IBAs on DoD Lands Good?

Ultimately, by identifying high quality habitats and recognizing them as being important for birds, the IBA Program seeks to mobilize the resources needed to protect these areas by raising public awareness of their significance. With over 71 million Americans who watch and/or feed birds, the public is a powerful constituency for bird conservation. An important distinction should also be made that an IBA is not necessarily an important *birding* area. An IBA exists for birds, not for bird watchers. IBAs can include Watchable Wildlife opportunities, but only if such



Henslow's Sparrow, a Watch List species, thrives on U.S. military installations. Photo: Teresa Vancodol

opportunities do not compromise the military mission or continued conservation actions. On military lands, IBAs can be an effective tool to engage adjoining landowners in landscape level conservation planning. Sometimes, it is the training mission itself that creates and sustains quality habitat. IBA recognition is thus an important tool to educate the public that while DoD lands are managed to support the military's training mission, they also provide significant habitat for the conservation of natural resources, including birds. When a conservation plan is desired for a network of IBAs, INRMPs and Corps comprehensive management plans already provide the necessary information; no additional management planning is required.



Vandenberg Air Force Base provides undisturbed beaches for nesting, wintering, and migrating shorebirds and waterbirds. Photo: Chris Eberly

### Nomination Process

Any military installation or Army Corps of Engineers project is eligible to be nominated as an IBA if it potentially meets IBA criteria. Once a site is nominated, the appropriate organization reviews the nomination. If it meets the criteria, the site is identified as an IBA. Once a site has been identified, official recognition as an IBA via a ceremony or other public outreach method may take place at the discretion of the installation. A Memorandum of Understanding with American Bird Conservancy and National Audubon Society outlines the expected procedures to be followed for the IBA process on DoD lands. DoD sites recognized as IBAs may receive a certificate and sign.



Western Snowy Plovers breed and winter on military lands in coastal California. Photo: Michael Stubblefield

### Conclusion

Identification of DoD lands as Important Bird Areas is recognition from an outside organization (American Bird Conservancy, National Audubon Society, or both) of the excellent stewardship that benefits resident and migratory birds and their habitats. Identification and/or recognition as an IBA entails *no* legal or management requirements. In addition, public access is not linked in any way to IBA status. Public bird watching opportunities exist independently; some IBAs will not be open for public access, and many sites with public birding will not qualify as IBAs. Regardless of public access, IBA status is public recognition of which to be proud.



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# Department of Defense Partners in Flight Steppingstones of Migration

Some neotropical migratory birds fly nonstop to their wintering homes in Mexico, Central and South America, and the Caribbean. Others proceed step-by-step, using patches of forests, meadows, shores and lakes to feed and rest along the way. These steppingstones of habitat are critical to the birds' survival. The Department of Defense (DoD) helps conserve habitat that provides these steppingstones. DoD natural resources managers incorporate bird habitat conservation objectives into installation Integrated Natural Resources Management Plans, which act as blueprints for resources management. Working with its public and private partners through Partners in Flight (PIF) and the North American Bird Conservation Initiative, DoD is ensuring that these steppingstones of migration are always available to neotropical migratory birds as they travel each spring and fall.



## Grassland Habitats

Aside from any other suite of birds, those that depend upon native grasslands for nesting habitat are experiencing the greatest declines. Some of the best remaining grassland habitats exist on military bases. First, other protected (and undeveloped) lands that emanate from military training exercises, reserve the historic natural fire regime needed to maintain native grasslands. DoD is studying the health and productivity of grassland systems to better understand regional differences in grassland type and composition, and their significance to birds.



## Panama's Canal Area

For most of the 20th Century, DoD was an influential presence in the Republic of Panama. All DoD-controlled lands around the Panama Canal were transferred to Panama by the end of 1999, under the provisions of the Panama Canal Treaty. Only a small percentage of the 80,000 acres of land that was under DoD care is developed. The 53,000 acres of tropical forest include some of the best examples of semi-deciduous forested habitat remaining along the Pacific Coast of Central America. These lands are in a forest critical to millions of neotropical migratory birds during their seasonal migrations. DoD has actively pursued conservation protection for the former DoD lands in the years leading up to their return to Panama. Thanks, in part, to these efforts, much of the land has been set aside as protected areas or incorporated into the existing Parque Nacional Serrano.



## BASH

The DoD Bird Aircraft Strike Hazard (BASH) Working Group is dedicated to ensuring communication and information exchange between DoD natural resources professionals, military aviation and safety personnel. The primary goals of the Working Group include promoting the reporting of bird and animal strikes, providing timely and accurate identification of remains, and reducing the attractiveness of airfields to avian species.

## Partnerships - Fort Hood

PIF efforts at Fort Hood, Texas, offer a good example of how partnerships enhance bird conservation efforts. The Natural Conservancy oversees programs for managing two endangered species: the Golden-cheeked Woodpecker and Black-capped Vireo. Through habitat conservation measures and an aggressive on-site trapping program, warbler populations have steadily increased in the past decade, and some bird species increased 50-fold while covered populations dropped from 90% to less than 50%. These efforts are augmented by partnerships with state and private groups, which provide additional control of trapping stations on private lands adjoining the Fort. A biologist exchange partnership provides hands-on experience for Central American biologists to gain knowledge of habitat issues on the breeding grounds, which helps them better manage habitat for overwintering Golden-cheeked Woodpeckers.



## MAPS Program

The Migration Avian Productivity and Survivorship (MAPS) program is a continent-wide bird monitoring program organized by The Institute for Bird Populations. The MAPS consortium effort uses cutting-edge techniques to collect population trend and demographic data on breeding birds, providing valuable insight into breeding productivity and annual survival. By overlaying this information with GIS-based habitat data, we can identify habitat characteristics that negatively affect breeding success. Management activities can then be directed toward producing habitat characteristics that are associated with successful breeding birds. DoD supports close to 100 MAPS stations, nearly 20% of the MAPS network.

<http://www.dodpif.org>



**LEGEND**  
• Critical Areas  
• Breeding Area  
• Wintering Area  
• Migration Routes  
• Seasonal, Daily and Semi-Daily  
• Seasonal and Daily  
• Seasonal and Semi-Daily  
• Seasonal and Daily

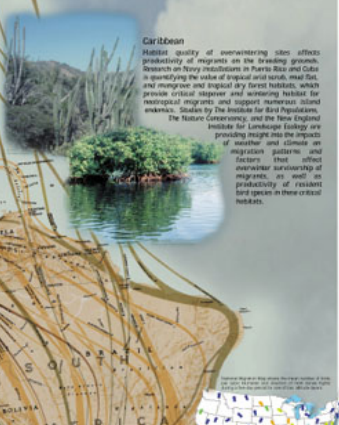


## Satellite

The Center for Conservation Research and Technology (CCRT) has been instrumental in advancing the development of satellite technology to track wildlife movements. Working with DoD PIF CCRT has tracked bird species that breed on migration through or winter on military lands. The first year of satellite telemetry data revealed precise locations of poorly known wintering areas for the Peregrine Falcon, which 25 years of traditional banding returns could not produce. Satellite tracking also uncovered the exact location of Townsend's Solitaire population in South America, and provides invaluable input into bird conservation plans.

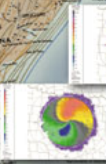
## Caribbean

Habitat quality of overwintering sites affects productivity of migrants on the breeding grounds. Research on PIF installations in Puerto Rico and Cuba is quantifying the value of tropical and subtropical, wetland, and mangrove and tropical dry forest habitats, which provide critical dispersal and wintering habitat for neotropical migrants and support numerous island endemics. Studies by the Institute for Bird Populations, The Nature Conservancy, and the New England Institute for Landscape Ecology are providing insight into the impacts of weather and climate on migration patterns and factors that affect overwinter survival of migrants, as well as productivity of resident bird species in these critical habitats.



## Radar Ornithology

Radar has been used since the early 1940s to monitor bird migration. In the last decade, Clemson University Radar Ornithology Laboratory (CROREL) has used the network of National Weather Service Doppler radars to map bird migration patterns over the entire U.S. These efforts have helped scientists and resource managers discover significant migratory movements, areas where birds rest and refuel during migration. These data also help pilots avoid bird collisions by allowing them to see where flocks of migrating birds are flying, so pilots can avoid flying into these areas. CROREL tracks seasonal, regional, and year-to-year variation in the amount of migration to monitor the long-term health of the North American migration system.



# Partnerships

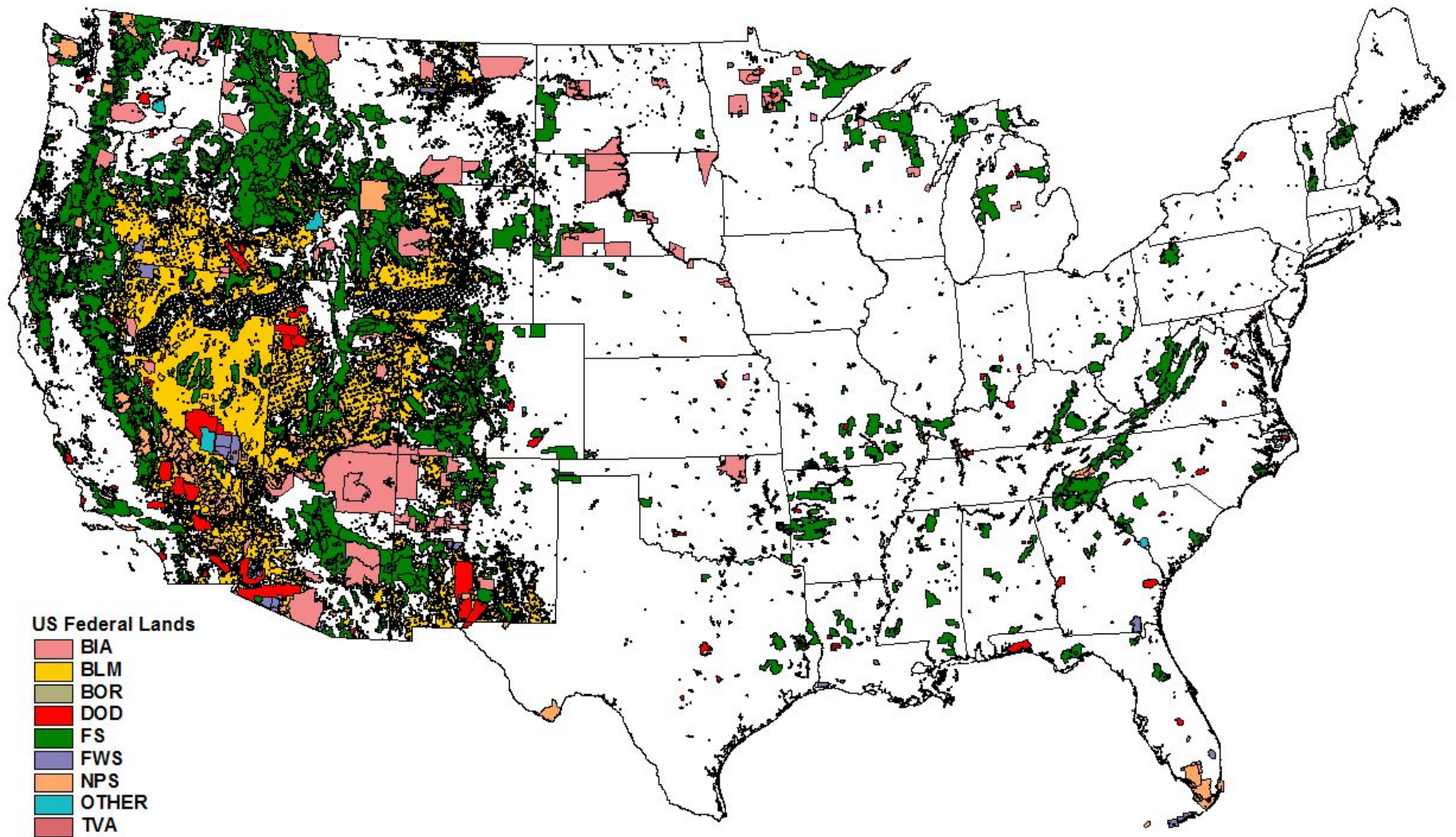
## *Partners in Flight*

- **Federal Agencies**
  - *USFWS, USFS, NPS, BLM, BOR*
- **Non-governmental Organizations**
  - TNC, American Bird Conservancy, Audubon





# Federal Agency Lands



# Partnerships

## Legacy 2005 Areas of Emphasis

- Program Management
- National and International Initiatives
- Monitoring & Predicting Migratory Patterns of Birds & Animals
- Integrated Natural Resources Management



# Partnerships

## SERDP FY2005 Statements of Need

- “Development of an Advanced Monitoring Strategy for Migratory Birds on Military Lands”
- “Improved Remote Sensing Technologies for Detection of Threatened and Endangered Species and their Habitat”







NALF Orange Grove, TX











# Partnerships

## Cooperative Ecosystems Studies Unit

- **Burrowing Owls**
  - Breeding, wintering, movements
  - TX, NM, AZ, CA
  - Other CESUs, Mexico, Canada
- **Hummingbird Monitoring Network**
  - Breeding, migratory routes
  - AZ, CA, NM, BC



*Desert Southwest  
Cooperative Ecosystem  
Studies Unit*



# Partnerships

## The Nature Conservancy

- **Conservation easements**
  - Protect the mission
  - Protect biodiversity
  - Protect adjacent landowners
- **Ecoregional planning**
  - Priority species assessment
  - Identify important habitats



# Bird Species of Concern

- **INRMP**
  - *Integrated* management document
- **USFWS**
  - Birds of Conservation Concern 2002
  - Species for DoD management action
  - MOU (EO 13186) - non-readiness
  - Migratory Bird Rule - readiness





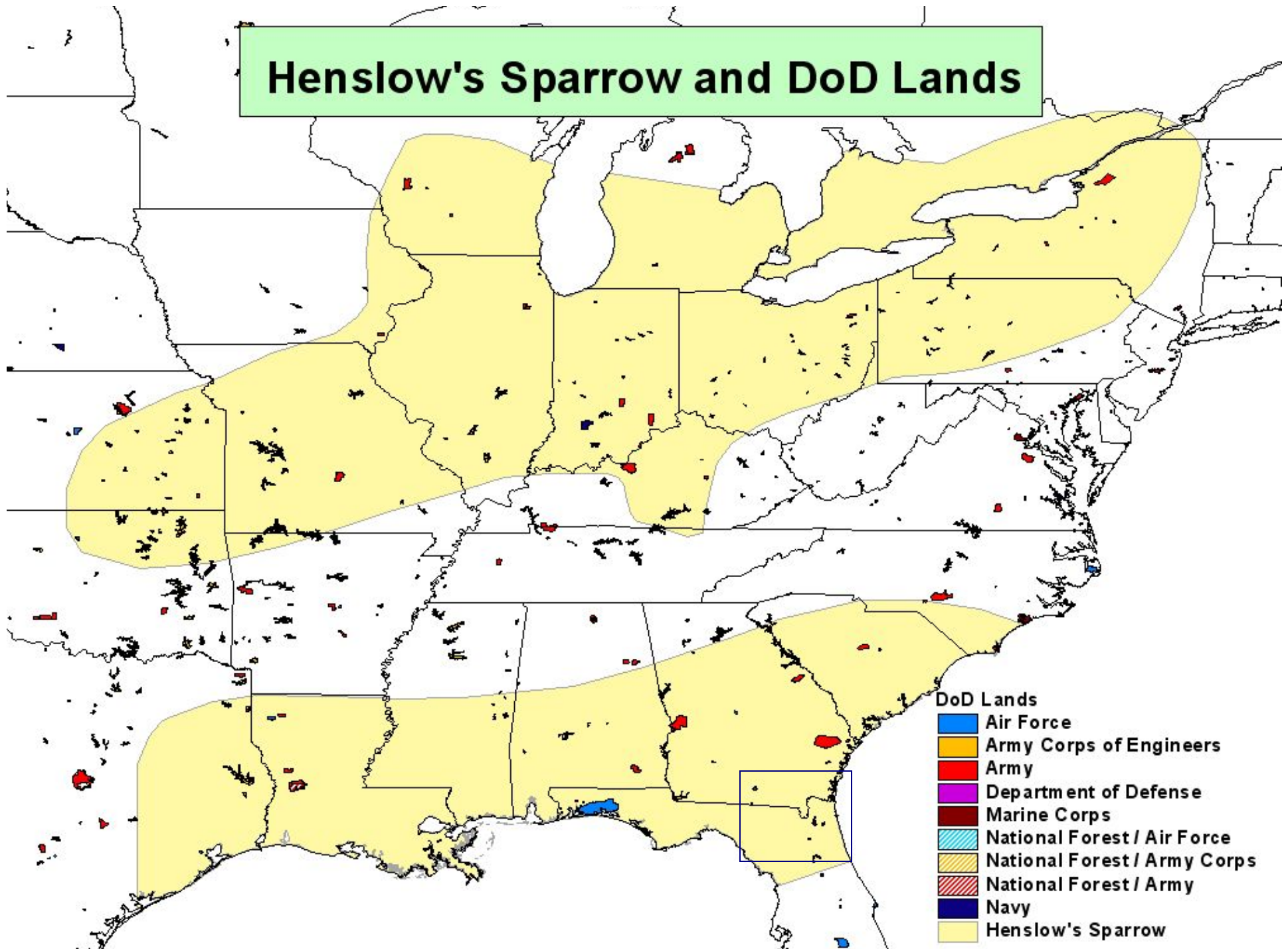
# Partnerships

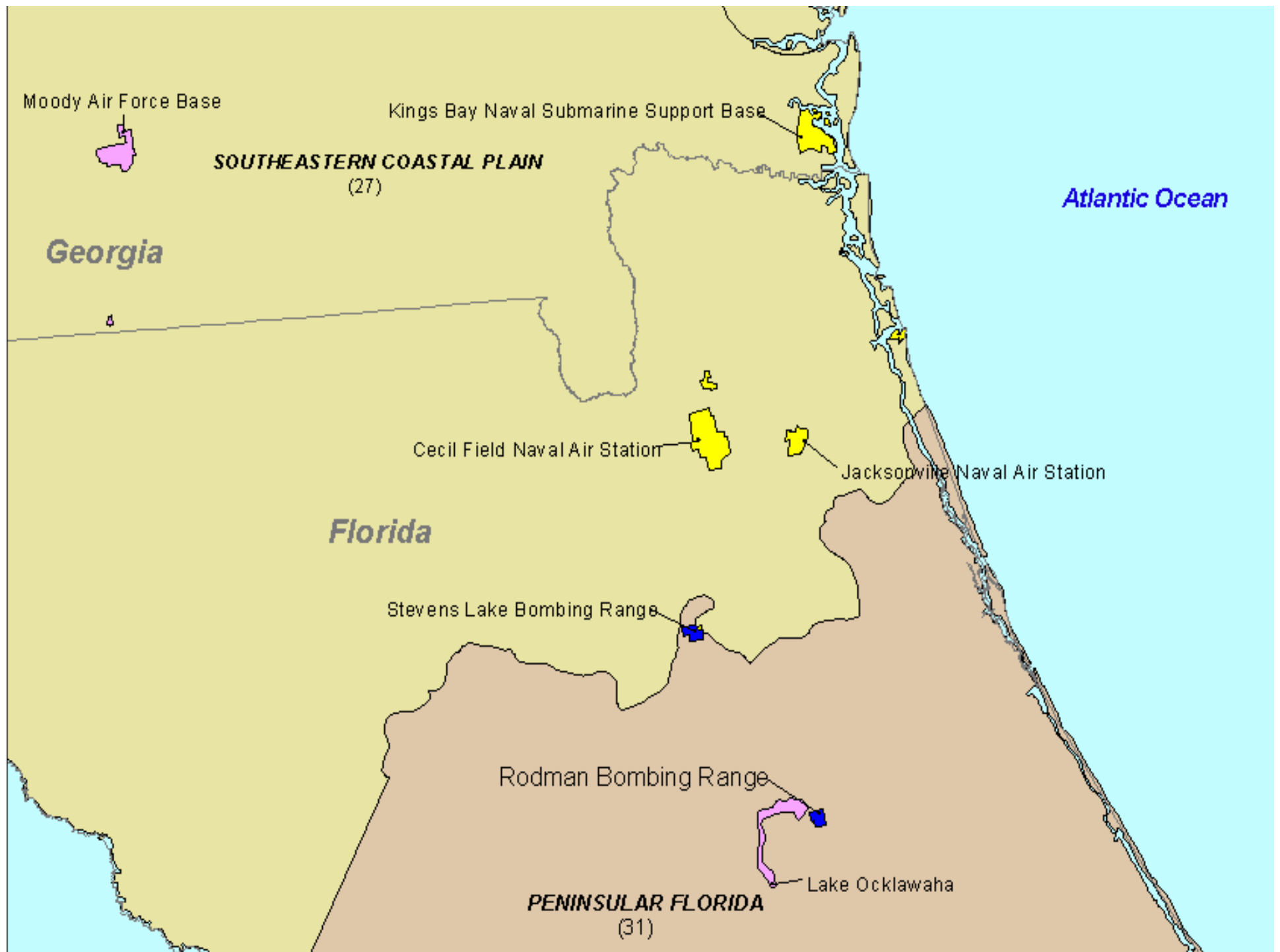
US Fish & Wildlife Service

- **DoD species of concern matrix**
  - **Birds of Conservation Concern 2002**
  - **Bird initiative priority species**
    - Landbirds, waterbirds, shorebirds, waterfowl
  - **Game birds**
  - **T&E**
- **AEC, States, TNC**



# Henslow's Sparrow and DoD Lands







# Partnerships

## DoD Services and Installations

- **INRMP process**
  - USFWS, States
  - Compliance and Stewardship
    - Game birds, T&E, species of concern
- **Funding**
  - Coordinated monitoring
  - Regional assessment



# Important Bird Areas

4<sup>th</sup> IBA Conference, Sierra Vista AZ

- **Partnering with Federal Agencies**
  - ❖ **Joint presentation**
  - ❖ **Discussion groups**
  - ❖ **Guidance document**



**“Fort Huachuca is a very good example of an agency that has a mission, but it’s allowing for multiple uses by engaging the birding public, while focusing attention on bird conservation.”**

**- John Cecil, IBA Program Director, Audubon**



## TECHNICAL WORKING GROUPS

### MONITORING ISSUES AND CHALLENGES

Avian monitoring projects on DoD lands typically occur on an as-needed basis. To facilitate sharing of data among our partners, we use existing protocols appropriate for the intended objective of the monitoring project. The Integrated Training Area Management program includes a protocol, Land Condition Trend Analysis (LCTA), which currently provides non-standardized avian monitoring data. DoD PIF will work with the Army to incorporate standard monitoring protocols into LCTA, making Army data compatible with the National Point Count Database and other sources. DoD PIF also supports the process of developing standardized regional and national monitoring strategies for various bird taxa and contributes DoD survey data to existing databases.



Photo by Chris Dwyer

Proper management of natural resources cannot be accomplished without baseline knowledge of the habitats managed by DoD. We help identify DoD lands that lack baseline surveys of bird populations and document sites that satisfy criteria for identification as Important Bird Areas or potential core bird conservation areas. A key monitoring program used on DoD lands is Monitoring Avian Productivity and Survivorship (MAPS; see page 31), which provides specific habitat based management recommendations.

### DoD PRIORITIES

- Identify installations lacking baseline avian surveys, and other monitoring needs
- Review and revise LCTA to include use of standard avian survey protocols
- Support MAPS program on DoD lands
- Contribute data to and utilize resources in the National Point Count Database
- Communicate and coordinate with adjoining landowner partners to coordinate monitoring efforts, where appropriate



Yellow-headed Blackbird  
Photo by John Roper

# Monitoring

## DoD PIF Priorities

- Baseline avian surveys
- LCTA
- Support MAPS stations
- National Point Count DB
- Coordinated bird monitoring



# Monitoring Strategy

- **Coordinated bird monitoring**
  - Current status / Mgmt questions
  - Tools and protocols
  - Partnerships
- **Funding**
  - SERDP
  - Legacy
  - Services, Installations







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